P80-0220
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ELECTRICAL POWER SYSTEMS

Mondays **25 lectures**

This course covers the principal methods of analysis used in solving problems in electric transmission and distribution systems. The major emphasis is placed on power flow, voltage control, short circuit and stability problems.

Equivalent circuits are developed for the representation of transmission lines, transformers, generators, motors and loads. Methods of analysis of equivalent networks include the use of symmetrical components, systems of equations, network reduction and the use of analysers and computers.

The methods of analysis are applied to typical problems of power flow, unbalanced faults, steady-state and transient stability.

Lecturers:	K. R. McClymont, B.A.Sc. H. Linck, B.A., P.Eng.
Time:	7.30 p.m., Fall Term October 5 to December 14, Winter Term January 4 to April 11.
Place:	Room E34, Electrical Building.
Fee:	$50.00.

UNIVERSITY OF TORONTO
UNIVERSITY EXTENSION

Session 1959-60

Courses in

ELECTRICAL ENGINEERING

FEEDBACK CONTROL SYSTEMS
ELECTRIC POWER SYSTEMS
TRANSISTORS & TRANSISTOR CIRCUITRY

ENGINEERING COURSES

The following courses will be offered this year through the Division of University Extension, in co-operation with the Department of Electrical Engineering, Professor G. F. Tracy, Head. The courses will be similar to those given to graduate students, hence a Bachelor's degree in engineering (Electrical) from a recognized university, or its equivalent, will be required for admission.

The content of the courses and the instructors have been chosen in collaboration with staff members of the respective departments, and these staff members will act as consultants.

All these classes are limited to 35 students. They are non-credit courses. Each course will consist of 25 lectures.

Registration:

By mail or in person at Room 207, 65 St. George Street, 9 a.m. to 5 p.m. daily except Saturdays. Application forms and course literature may be obtained by writing to the Director, University Extension, 65 St. George Street, Toronto, or by telephoning WA. 3-6611, locals 301, 304, 526, 527. In order to accommodate students and enable them to enrol during the evening, registrations will be taken—

Monday	September 14th
Wednesday	September 16th
Monday	September 21st
Wednesday	September 23rd
Monday	September 28th

from 7.30 to 9 p.m. in the Wallberg Building, corner of St. George and College Streets.

FEEDBACK CONTROL SYSTEMS

Mondays **25 lectures**

A study of the analysis and synthesis of linear feedback control systems by means of differential equations and the Laplace transformation. Topics covered include methods of compensation, stability, root-locus methods, systems with time delays, and A.C. control systems. An introductory study of non-linear systems is also made including the use of describing function and phase-plane methods of analysis.

Lecturer: Ian McCausland, Ph.D.

Time: 7.30 p.m., Fall term October 5 to December 14, Winter term January 4 to April 11.

Place: Room E23, Electrical Building.

Fee: $50.00.

TRANSISTORS AND TRANSISTOR CIRCUITRY

Mondays **25 lectures**

A study of the properties of certain types of semiconductors and their application to devices such as diodes and transistors. The physical basis of transistor action is discussed. This is followed by a study of a wide range of transistor circuits.

Lecturer: J. V. Hanson, M.Sc.

Time: 7.30 p.m., Fall term October 5 to December 14, Winter term January 4 to April 11.

Place: Room E21, Electrical Building.

Fee: $50.00.